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ABSTRACT

Seven papers are presented from a conference where librarians and their nonlibrarian colleagues met to discuss the problems facing college libraries in the present period of change in British higher education. Papers discuss the role and responsibilities of the library in relation to conventional and alternative instructional methods and the significance of learning resources in the reorganization of higher education. Costs, standards, and the cooperative efforts of the libraries of polytechnics, schools of education, and universities are reviewed. Finally, two papers deal with the design of library facilities and with construction and expansion programs, using as examples the building programs at the Cardiff and Worcester Colleges of Education. (SL)

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COLLEGE OF EDUCATION LIBRARIES

AND HIGHER EDUCATION

Selected papers delivered at a DES/ATCDE/LA Joint Conference held at the Windermere Hydro, Bowness-on-Windermere, Westmorland, 16th to 19th October 1973.

edited by

Jean Wood

IR 002 014

Association of Teachers in Colleges and Departments of Education, Library Section.

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INTRODUCTION

The second conference of librarians and their non-librarian colleagues, Principals, tutors and HMIs, met again in Windermere to discuss the problems facing college libraries today.

Since the first conference held in 1972 two important documents with far-reaching effects for the participants had appeared: the Secretary of State for Education's White Paper *Education: a framework for expansion,* (HMSO 1972) and the *Colleges of Education Library Research Project* (Manchester, Didsbury College of Education, 1973). One session of the conference was spent in seminar groups discussing the latter. A report of the general discussion following the reporting back from these seminars is included, although generally reports of the animated discussions which followed the papers have not been included. An account of the useful display on library planning and design has been prepared by the organiser.

During the conference particular attention was paid to the wide range of resources for learning in higher education generally not only in the Colleges of Education and the demands made upon the library to support the educational work of its institution: the dynamic role of the college librarian was also stressed and the need for adequate buildings and staff to enable the library to fulfil its educational purpose.

This selection of papers is not in exact order of presentation at the conference and all contributors have been given the opportunity of editing their paper for publication. Views expressed are, of course, those of individuals and do not reflect the views of sponsoring bodies. The editor would like to thank the authors for their co-operation in enabling this selection to be published. In particular the thanks of all the participants go to the Conference Director, Mr. W.S. Fowler HMI, and his planning group – Eric Cunningham, Tony Edwards, Peter Pack (Conference Secretary) and Muriel Ross of the A.T.C.D.E. Library Section and the Library Association Colleges, Institutes and Schools of Education Group, for a most interesting and worthwhile conference.

Jean Woord
Brighton College of Education

LIBRARIES AND THE LEARNING PROCESS IN HIGHER EDUCATION

by

PROFESSOR J. BLACK
PRO-VICE-CHANCELLOR, UNIVERSITY OF BATH

The division of the recurrent grant of an institution of higher education into allocations for teaching staff, for the library and for central services, has planning and administrative advantages, but it can have unfortunate consequences for teaching since the three come to be regarded as distinct, and almost unrelated areas of institutional spending.

Now, with the advent of new resources and needs, particularly with Educational Technology, it can appear to the librarian that another distinctive and unrelated competitor for a share of the limited funds available has arisen. Hence it comes as no surprise to find that each division makes a strong demand to preserve its historically established position, irrespective of any changes in teaching methods. In addition there will be many more sectional demands such as more support staff, more promotion, more secretaries, more student health service.

But the librarian may derive a glow of pride when he finds that all those supplicating for more funds unite together in an intellectual tribute to the library as a storehouse of knowledge, and vigorously demand that more money be allocated to it – but only once their own requirements have been met! They do not apparently have to specify which aspects of the library should be specially supported. Is it the staffing problem, more journals, student texts, research collections, information retrieval, or even just more books?

Having made this ritual genuflection to the library as the temple of scholarship and learning, most teachers return to their desk or laboratory. If in positions of authority and influence, they wage their budgetary wars on their fellows in order to maintain their departmental staff-student ratio, and consumables fund.

This universal acclaim for the library quite rightly stems from the 400 years of academic respectability and proven performance of the printed word. The new claimant for funds, educational technology, and its associated non-print material, lacks a similar academic esteem because of its suspect origins in the entertainment and communications industries, and the shortness of time it has had to demonstrate its effectiveness. To the librarians the products and activities of these units may make them appear to be rivals within the institution, rather than built-in contributors to the total teaching effort.

Seen through the eyes of the student, however, all these resources, whether it is academic staff as lecturer or tutor, the books and journals available for study in the library, the television and slide-tape programme are closely linked. Taken together, they provide him with a "learning situation": the more effective this is, then the more successful he is likely to be in attaining the required standards of performance.

The interaction of these aspects of higher education teaching and learning is so very complex that it seems to me that it is no longer fruitful to discuss any particular aspect of the total process in isolation from the others. There is a danger that the

innovator may dismiss the traditional outlook of the old fashioned teacher who believes or provoke in the librarian a Luddite view of what he believes to be the encroachment of machines and mechanistic approach which can destroy the cherished personal link between teacher and pupil, and the contribution of the library for private study. This suggests that an elementary systems analysis might make us more aware of the problems of the relationships involved, and hence make the librarian aware of the very considerable role he has to play with the adoption of the new concepts and resources.

The Present System

In a conventional instructional situation (Fig. 1) a teacher or instructor has an agreed curriculum or programme and undertakes to transmit to a group of learners sufficient information and understanding to enable them to be able to perform a defined task to some previously determined standard of attainment. This performance is measured (or so we believe!) by giving the learners examinations or tests on completion of a specified period; in the case of physical skills this is probably quite an accurate procedure, but with more abstract or intellectual modes of behaviour it becomes increasingly difficult. The group may have been arbitrarily selected because its members have comparable previous attainments, or because they are eventually going to work together as a team, or because they happen to be free at the same time, or because they are roughly the same height! Thus, in most cases, the teacher talks to his concept of a model learner and hopes that all the group cluster round his model; it is just bad luck for the learner in the group who has a different background or achievement. Only rarely does the teacher start with a 'pre-test' of a few simple questions which will reveal just what is generally known throughout the group, and what is restricted: thus in a lecture programme on, say, damage from industrial noise, the whole group may have passed A-level physics, but only ten per cent may have learnt about sound. Without some introductory explanations most of the group start off with a handicap, and later failure may be wrongfully attributed to lack of effort or poor instruction.

The teacher may use the blackboard, slides, film and even direct TV to improve his communication, and there is no doubt that some such 'entertainment' does enhance learning within the lecture. But these are only the teacher's audio-visual aids, in that he selects the material to be displayed; in most cases it will not be available for further use by the learner, apart from what has been recorded in hastily written notes.

In addition to lectures, the teacher will refer the learner to printed material in books, manuals and handouts. Their significance in the system is that they make the learner aware of the contributions self-instruction can make to his learning, and the value of learner-available material. This self-reliance should also inculcate the habit of seeking out information for himself, whether in a library or a modest catalogue store. Learning at a lecture is fairly passive, so in our system we use personal activities such as laboratory

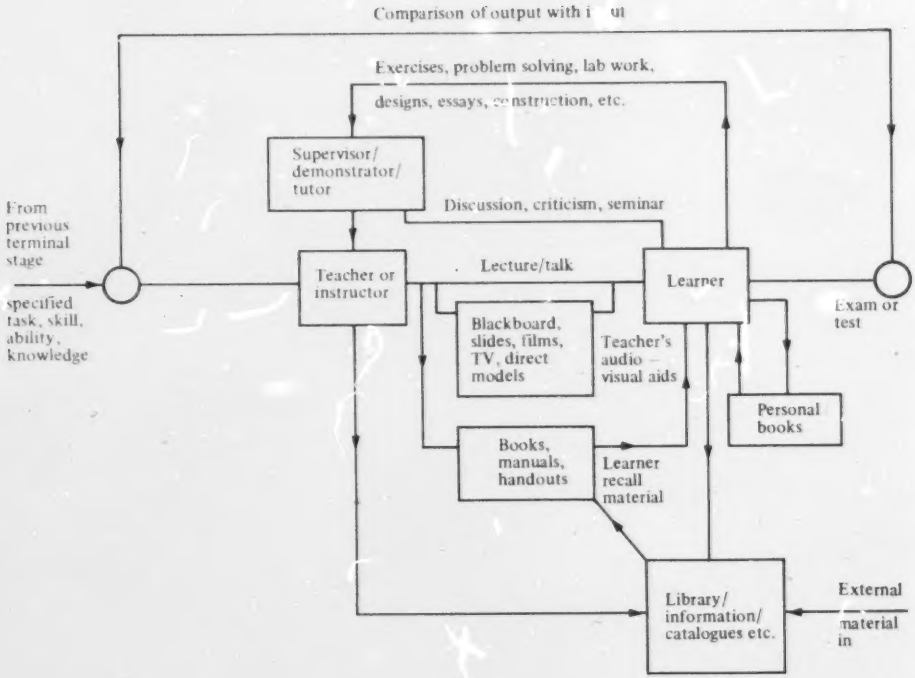

Fig. 1 A systems presentation of a conventional teaching/learning sit uation, using teachers' audio-visual aids

experiments, designs, projects, essays, reports, constructions – any challenge to individual effort. Value will be gained from these only if they are criticised or discussed by the supervisor, tutor or instructor and the comments passed back immediately to the learner. In system parlance this feedback signal enables the learner to assess where he is and how he is getting on, and thus to take any necessary action to get back on course. For example, on a three-month course, a weekly correction and discussion period is obviously much more valuable than a monthly one, which would allow the learner only two attempts to improve his report writing in the light of the criticisms. The feedback 'loop' can also be closed by group discussions and seminars, since these are much more flexible than the

rigid lecture programme, which tends to keep to its timetable irrespective of the learner's progress. This frequent personal supervision, marking, and discussion leading to maintain good feedback is the main justification for costly teaching staff.

The New Concepts & Techniques

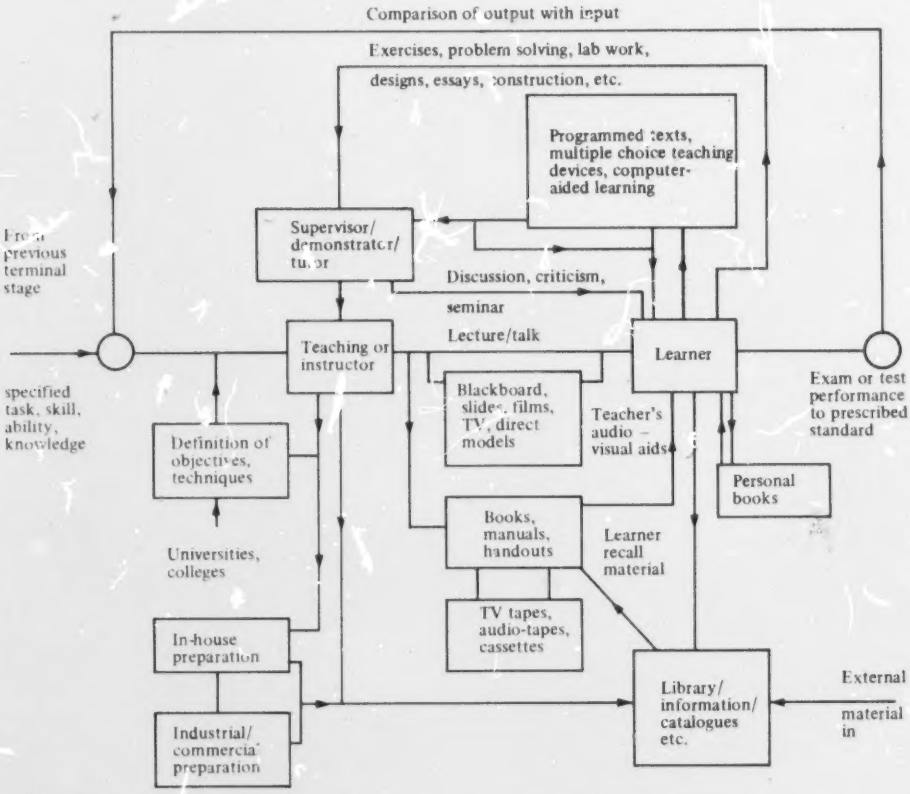

Fig. 2 The contribution of the new methods and techniques to the conventional system

11

Now let us apply to this conventional system the techniques made available by the new resources (Fig. 2). To the printed material for learner-availability we can add, by means of film and the memory of magnetic tape, audio and video recordings with all the appropriate devices for convenient access. The existence of this new form of knowledge-source, and its storage and display imposes a duty on the 'library' to cater for non-print material. Library staff must, therefore, become aware of the range of programmes available, in the same way as they are at present responsible for information on other "published" material. In the system therefore we must now include links from the library to external sources of these new forms of scholarly and instructional material. (For example the National Council for Educational Technology – now to be replaced by the Council for Educational Technology for the United Kingdom – has set up HELPIS – Higher Educational Learning Programmes Information Service – which issues regular catalogues and materials made in higher education). A further need in our system, once we start using this non-print material, is to produce it, since it requires professional and technical skills to obtain a standard acceptable to the learner. This leads to two developments: the 'in-house' unit, usually with modest TV, film and other production facilities, in which the teachers can be actively involved in making the programmes, and the industrial/commercial units whose resources are much more extensive, and which can produce material for use throughout a particular educational sector, or industry or service.

To make the best use of this vast storehouse of recorded material we must incorporate much of it in self-instructional programmes. Looking at the learning loops in Fig. 2 we see that the new techniques such as programmed learning, multiple-choice tests with immediate assessment, structured learning, and computer-based learning have one feature in common: they provide additional and powerful closed loops with feedback directly to the learner, so that he can continuously assess his own learning and take appropriate individual and personal action with the range of self-instructional material available. These loops can also simultaneously provide the instructor with information on the progress of all the learners, and enable him to intervene, by means of the small-group class, discussion group or seminar, on aspects which appear to be difficult or misunderstood by most of the group. So paradoxically, what at first sight may appear to be a mechanical, impersonal means of teaching, in fact, enhances the opportunity for the teacher to devote most of his efforts to those learners who need personal attention; in other words, the role of teacher or instructor changes from being the mere transmitter of information in the lecture room to that of the tutor or supervisor, or motivator.

Implications for the Teacher & Librarian

There is now a new form of 'eternal triangle' between the teacher, librarian, and Director of Educational Services, each with his own particular task, but with a number of joint tasks. (See Fig. 3.) The teacher must devise the strategy, write the course and

assemble the associated material in collaboration with his other two colleagues. When self-instruction is more widespread the academic staff may have to devote much more time to preparing and producing material, and very much less to repeating its transmission.

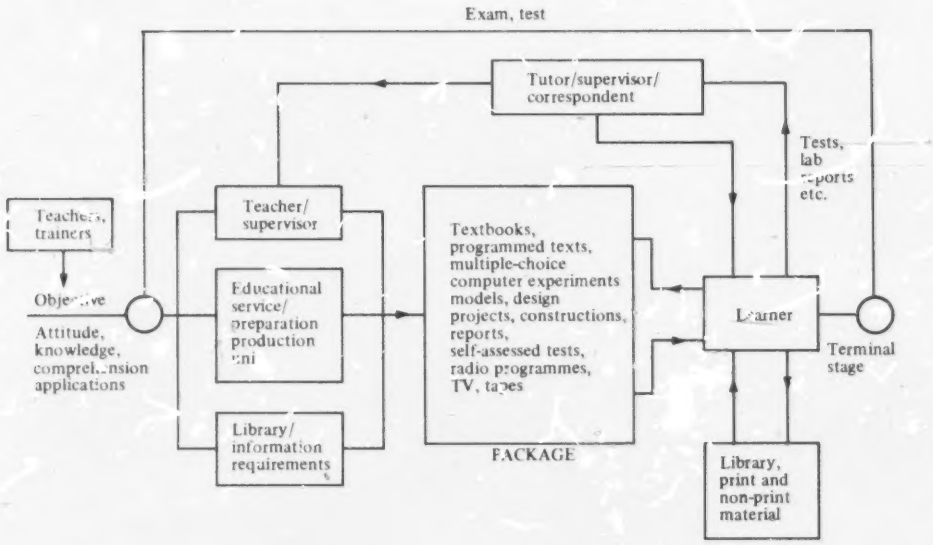

Fig. 3 The 'partnership' produces a package for the learner's self-instruction

The library will be heavily involved in selecting material and retrieving the necessary information and making it available. The contribution of the library and the educational services in this production, access and display of this new form of tutorial work, which incidentally might involve much more employment of subject-tutors in the library, now warrants a specific budgetary allocation as a learning resource. Thus in place of the ill-defined chant of "support for the library" we should have a firm demand backed by quantified costs for student learning related to particular courses. This could include the books, journals, information, display, subject-tutors within the library – any resource which has been clearly demonstrated as making a contribution to the total learning system.

If we progress to a further extension of the traditional pattern outlined to the stage where the student is presented with a 'package' which allows him full self-instruction in a particular subject or topic, then even closer collaboration with this team will be essential (Fig. 3). In this situation the learners either individually or in groups work through this 'package' consisting of textbooks, question papers, experiments, designs, cassettes, etc. Much self-assessment will be included to provide the feedback loops. The tutor or supervisor can then act much more effectively as a guide and moderator for the progress of the learner. Such schemes are already in use in various forms, such as those in the Open University or in many sections of medical education.

An Example of Teaching & Library Interaction

As a relatively inexpensive example of how the use of non-print material in a Library can simulate the conventional use of library facilities, I would like to describe how groups of engineering students in my School carry out an Air Compressor Test. Traditionally, the students used to gather round the air compressor in the laboratory and after twenty minutes running to let it settle down they took the appropriate readings, calculated the results and left the laboratory to carry on with other work or write the report.

We have now made a video-tape of a description of the compressor and an actual test in operation with a zoom-in to all the instruments so that the readings can be taken. The student group now meets in a room in the library where the video-tape can be viewed and they are each supplied with a set of headings on to which they must record the readings as though they were actually carrying out the test themselves. They then complete calculations and get the efficiency, etc., immediately, but both the tape and the handout have set them certain tasks such as to compare the results they have derived from the laboratory compressor with the latest compressors available, or with other basic data. This directs them to the appropriate journals and catalogues or to the relevant textbooks.

Thus at the end of an afternoon they have covered not only the routine analysis of laboratory test results but have had to explore and instruct themselves by means of print [illegible] extend this to a little self-assessment test to complete the [illegible] and it might end with a seminar with a subject-tutor in the same room.

Conclusion

To sum up, learning is indivisible, [illegible] produce the best situation for learning should not be overwhelmed [illegible] tive convenience of having separate budgets for staffing for library [illegible] production of additional material. The functional and financial [illegible] d for here would make

much more effective use of existing resources, and could avoid the wasteful divisive effects which can follow from competitive claims put forward in isolation from each other. But perhaps much more important than all these put together, we would have contributed to inculcating in our students attitudes of seeking out information, knowledge and learning for themselves which would be valuable for the rest of their careers.

THE SIGNIFICANCE OF LEARNING RESOURCES IN THE RE-ORGANISATION OF HIGHER EDUCATION

by

R. CLAYTON. PRINCIPAL.

MATLOCK COLLEGE OF EDUCATION

Inviting a college principal to address a conference of college librarians and further provoking him with the topic you elected for me is daunting and salutory (if this weren't being published I might use other words); it is also challenging, a great honour and possibly a useful opportunity. I hope so.

Having read the report of your 1972 Conference and having attended this one, I note that my topic is far from new, though clearly I detect that the arguments are still current. The re-organisation of Higher Education is spelt out in a range of well-known documents and I must take these as read: the James Report, the White Paper and Circular 7/73. Their spellings are respectively Old English, Middle English and New English; within twelve months we shall meet the spellings of "common usage".

Likely effects of the re-organisation of Higher Education: I must indulge in speculation. Any list of probable effects, of future outcomes, is at this stage likely to contain the following, and you will not be slow to note the implications for librarians:

1. Larger institutions: last night Mr. Luffman warned us of the problem of split site locations: management problems will need to be taken seriously: there may be a danger of "factory" learning, and a need to safeguard the learning process of the individual. The implication of Circular 7/73 is, that to be viable educational institutions must have a minimum size of 1000–2000 students, and recently the DES seems to have lifted its minimum to 1200 students. College staff and students and the providing bodies are looking at the prospect of federated, amalgamated or linked institutions. At worst there may be asset stripping operations to follow.

2. Though there will be fewer students vocationally directed towards teaching, we, in common with our institutions of Higher Education, will note the pressures for much more course content to be vocationally directed – whatever the vocation.

3. There will be more interdisciplinary courses: less traditional academic discipline courses. I have seen the Didsbury course proposals, and, because I am with C.N.A.A. visiting Berkshire College of Education in a fortnight's time, I have seen the courses for their proposed B.Ed. Honours four-year degree. The Berkshire Librarian told us in the discussion period yesterday of the tremendous amount of work this had taken: identifying books for essential and recommended book lists, etc.

4. There will be an attempt to provide more flexible courses and more options.

5. There will be more short courses: on-the-job, in-service, sandwich, varied length – weekend to one term; intensive short bursts by the highly motivated – plan for that!

6. I think there will be more home-based students, both full-time and part-time, if only because so many more of our students will be on in-service courses. It follows that there will be greater pressure on library seating accommodation. There are also, then, implications for car parking, lockers, materials, and so on, even perhaps library snack bar provision as a resource!

7. There will be more "packaged" courses; there will be well-defined "course units" preferably with an established currency enabling them to be used towards other qualifications. (This already exists in one college of education in its association with the Open University).

8. There will be more diversification, possibly to the point at which librarians will need to identify the limit, the breaking point, beyond which a college's learning resources will not stretch. Or more likely the librarian will be instructed to so manage the learning resources that they cope with the degree of diversification that circumstances will require.

9. Curriculum innovation and the evolution of new course structures will need to be planned in as the normal pattern. Here I see crucial roles for the librarian and possibly as yet ill-considered demands and needs of learning resources. In the time available I can only refer you to a reference or two, with due deference: J. Walton (Ed.) *Curriculum organisation and design.* Ward Lock Educational, 1971. [1]

Also may I suggest that, it having been stated that a teacher's essential role is that of a change agent, there might well be a similar role for the librarian. So I would refer you to Professor Eric Hoyle's work: an article entitled "The role of the change agent in educational innovation" in the book edited by Walton and another Hoyle article "Planned organisational change in education" *Research in Education,* May 1970, No. 3. p.1 – 22[2] You will, I am sure, note that while these comments and their implications on learning resources are placed by me in the context of innovation in colleges, they are equally applicable, and also affect us, in that they relate also to curriculum change and innovation in schools. I am sure you will also have noted the implication that the library's learning resources need to provide for yourselves and others in your college, including the Principal, who will be a part of this perpetual process of planning change.

10. There will be more linked courses: Dip. H.E. to degree, and to other qualifications, even perhaps to qualifications of other countries, for example those of Common Market states.

11. There will be more broadly based courses, as recommended by Robbins, as they are increasingly demanded by industry.[3]

12. There will be more rationalisation of proposed new courses at the new Regional Advisory Councils. Again this means the submission of carefully outlined course plans, including a statement on learning resources.

13. The rationalisation of libraries, of resource materials of all kinds, and so on, is no new topic.[4]

14. There is likely to be greater attention to the teaching methods of tutors, c.f. the University of London's University Teaching Methods Unit.

15. Financial considerations will continue to loom large. Resources will always be scarce. Cost effectiveness won't just be a headache for college principals. And if you are thinking of asking "Isn't the Dip. H.E. higher education on the cheap? don't expect me to have an adequate answer either.

POINTS ARISING

A. Staffing and resources

It must be abundantly clear to everyone that a reappraisal of library staffing and resources is essential. For the present as for the future, our providing bodies, in most cases L.E.A.s, will continue to require this need to be identified in terms of real growth. And it may prove difficult, even so, to effect much change until we are in a position to outline for them our future roles. However we may need to consider some interim measures: more part-time staff; some annual allocation of temporary staff for periods of high pressure; yet another assessment of the deployment of staff; identify and eliminate trivia; some sacred cows may have to go too – or at least be put on a diet. Last year you were told by one of yourselves to delegate more: have you? There may be other temporary measures that could be explored with your S.A.O. or Principal: we probably need to look carefully at college staffing as a whole: it tends to get over-departmentalised and this can be wasteful, especially in institutions where high pressure periods arrive unevenly.

There was a conference on resources planning in London this last July. Perhaps we need to note some of the points made then. Eric Robinson said "the golden age is over". Professor Bottomley of Bradford University drew attention to the duplication of facilities in neighbouring institutions. Mr. Kay, D.E.S. architect, stated that he felt the use of teaching space was too low.

Finally then on staffing and resources let me remind you that need has to be demonstrated: this is difficult enough without re-organisation ahead.

B. TEACHING AND LEARNING OF THE FUTURE

On Tuesday Professor Black asked us to consider curriculum reform as just asking "What are we trying to do?" And he demonstrated, by a systems analysis approach, what he considered the teaching-learning system was or might become.

Findings in the psychology of learning and experiments into the effectiveness of teaching methods will increasingly contribute to and modify the teaching-learning processes in schools and in institutions of higher education. There is no doubt that these twin processes of teaching and learning are now being more effectively exploited, so as to increase the overall effectiveness and quality of the learning experience. Make no mistake, new patterns of learning are emerging, and alongide are new learning resources. I believe this will accelerate with the re-organisation of higher education.

We may need to accept perpetual innovation in methods just as we learn to accept the perpetual innovation in course content and organisation. Don't we know already that, really, the two are inseparable?

May I draw your attention to that useful monograph by Ruth Beard and Donald Bligh.[5] It covers this area wisely and thoroughly; many of the traditional teaching-learning methods are challenged.

I believe that all this material needs looking at carefully by librarians. I am sure you don't accept that only after others have had their say should the use of the library and its resources be "fitted in". Equally this needs interpreting in proper physical provision. As more learning takes place or more teaching takes place at the library, at the location of the learning resources, so more appropriate physical provision will be necessary. Or put the other way round, those using learning resources may need to encroach far more into what is labelled teaching space. Now either we accept a botched up compromise situation, the D.E.S. Red Book specifications blurred at the edges, or, having resolved what is really necessary, we aim for a complete re-think of approach, a new Red Book, conceived after the proper use of learning resources has been researched. This does not necessarily lead to more square footage, more expense.

C. LEARNING RESOURCES: BOOKS VERSUS TECHNOLOGY?

I would have hoped that the sub-title "books versus technology?" was inappropriate, but it is clear from numerous libraries and recent articles and other literature that many do contest that there is something of a contest. I really do not feel qualified to speak in detail about particular learning resources. May I merely therefore venture one or two points. Much that was said about books at your conference last year I would heartily endorse.[6] And I would always much prefer to curl up with a book at bedtime than with an overhead projector. However, I do make a plea for assistance for students who need to build up their own personal learning resources centres. These will be largely of books. Which should they select? Which periodicals? How much should be spent on passing fad, how much on lasting reference material?

In an address to educational technologists, Lord Robbins noted that the textbook was the first teaching machine. Nevertheless he noted the encouraging progress being made in the field of educational technology. He did however emphasise "the need for the vanguard to maintain communication with its base."[7]

Educational technology was defined by George Leith in 1967 as "the application of scientific knowledge about learning, and the conditions of learning, to improve the effectiveness and efficiency of teaching and training." Certainly educational technology has a comprehensiveness and a diversity which we need to appreciate. More research and experimentation is still necessary, and obviously it adds just part to a system of instruction, but it is certainly here to stay and is being used more effectively. We cannot help but have noted the success of Open University courses. The debate will continue. It seems a pity that in *School Libraries: their planning and equipment*[8] provision for non-book resources is covered only sketchily. In Colin Flood Page's most useful book *Technical aids to teaching in higher education*[9] we may read the following: "this forbidding array of instructional gadgetary has arrived and needs to be understood; . . . vast expenditure on machines is no guarantee of good expenditure; . . . of all the student's aids the paper-back book is the best of them all; . . .Students will tend to learn from what is readily to hand;

. . . the best higher education is geared to the way the learner learns and not to the way the teacher teaches." It is clear that more aids are becoming available and that their use for both learning and teaching is increasing and advantageous.

QUESTIONS TO RESOLVE

It seems to me that there are a number of questions which College Librarians need to resolve in consultation with colleagues.

1. Do the new learning resources added to books make a Learning Resource Centre? May a librarian become the Director of the Learning Resource Centre? Need all the resources be centrally housed? At present it seems that librarians are producing their policy statements and educational technologists theirs. Ought the two groups to meet? In the Policy Statement[10] from the educational technologists we read of the staffing recommended for a viable Resources Centre:

Academic Staff: Director of the Service; at least one Lecturer in Educational Technology: Tutorial Supervisor of the Resources Collection – to be a librarian with appropriate library and clerical staff backing.
Technical Staff: Television engineer; graphic artist/tutor; two audio-visual technicians; storekeeper.
Administrative staff: Administrative assistant; Secretary/shorthand typist.

We need to ask if this is to be developed along with or apart from the modification of the traditional library? At last year's conference Dr. Enright[6] stated that "each library needs a policy towards new media in order both to survive and to prosper". Where did I read "the librarian always hidden away in a silent back room will shortly be either locked in quietly and forgotten or trampled to death by the forward march of teaching resources"?

2. There needs to be earnest endeavour to achieve in-service training facilities for librarians. However it is no use gaining this, as of right, for a year or perhaps better for one term study leave, if librarians are not ready for such opportunity. Meanwhile there are many visits which can be made, preferably within an organised regular programme. When did you last visit a local school during teaching practice? the library of the nearest Teachers' Centre? a reading centre? the personal library of a student?

3. The changing role of the librarian still seems to need attention. May I make a special plea for regular meetings with each department in each college for consideration of the selection of all learning resources. The work we did on assembling a bibliography for the learning-teaching resources on London[11] emphasised, for me, how necessary yet how difficult this task can be. It also illustrated the point that, when selection is done thoroughly, there is much to be said for the resulting information being made available nationally. The work and possibilities of such bodies as N.C.E.T., or its successor, of H.E.L.P.I.S. and C.E.L.P.I.S. need thorough appraisal by teams in each college: – with the librarian acting as change agent? The advent of the reappraisal of all courses in

colleges presents the librarian with the moment to decide to be in on the total act.

4. The possibility of colleges having a greater community role also has learning resources implications. Colleges will be seeking to service greater numbers of schools and teachers in their areas. If in-service courses are to grow to become about a third of our work, ought teachers to be helping us with selection of materials? The role of many colleges, however, may extend to a wider service within the community.

5. For librarians the question of communication and status also needs attention. There is a desperate need to build bridges with others. A major link at present is within the structure of academic boards.[12] This structure may be wrong for the new role of colleges that lies ahead. But whatever the changes, a Learning Resources Sub-Committee is essential. And with the others on this sub-committee I would put a tutor who understands the developments in the psychology of learning.

6. There is a great need to continue library research activity. The Shercliff Report[13] is disappointing if you expected it to provide the answer to this year's staffing and book fund problems. But it has much to say about librarianship, and it identifies many areas that need further investigation.

Finally may I say that I believe that sound and successful management is the key to the future. There will need to be an active partnership with many, there is much to be done; but I hope and expect you will receive generous support as you forge ahead.

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LIBRARIES IN HIGHER EDUCATION –

COOPERATION AND COMPARATIVE STANDARDS

by

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The precise future pattern of higher education is still uncertain. We have the White Paper *Education: a framework for expansion,*[1] issued in December 1972, and several official statements following this. By 1981, it is intended that there will be about 450,000 places in higher education, equally divided between the university and non-university sectors. (This in itself does not represent a radical change: in 1971–72 there were 236,000 places in universities in Great Britain, compared with 227,000 in advanced further education and colleges of education, but many of these latter were of a rather lower level than is intended for the future). The two sectors will not be coordinated for any but the most general financial and planning purposes; the universities will, presumably, still have the University Grants Committee over them, while the non-university institutions will still be the responsibility of local authorities. The Government has rejected the proposal made by the Select Committee on Expenditure that a Higher Education Commission should be set up to distribute resources for the whole of higher education, and also its recommendation that the Universities Central Council on Admissions be extended to cover all advanced courses. Within the non-university sector, the decision of the local authority associations to set up a Local Authorities of Higher Education Committee will doubtless aid coordinated planning in that sector. There are also to be Regional Advisory Councils for Further Education, whose composition, structures and boundaries are still to be precisely determined.

The polytechnics will continue to expand and develop, in quality of courses as well as quantity. The colleges of education are in a less clear position; some may turn into separate institutions of higher education, concerned with the arts and social sciences, whether individually (only the largest colleges would do this) or by federating with other colleges (this is most likely to happen in London), some will merge with polytechnics or universities, some will remain as specialised teacher training institutions, and some will close altogether. A fair proportion – perhaps a majority – of future students in the 'new' colleges will be expected to take a two-year Diploma of Higher Education rather than a degree. The situation is complicated by the voluntary colleges, which have a large measure of independence. It is very difficult to talk sensibly about comparative standards and cooperation between institutions which are in a state of flux. It is of little interest to compare library provision in a college of education at the present moment with that of a polytechnic, when the polytechnics are receiving special funds to build them up, and the colleges of education will be undergoing transformation shortly.

In universities the future is rather clearer. One principle has already been established: unit costs are to be held stable. This is a matter of great significance to libraries, since the volume of publication of books and periodicals is certainly not remaining stable, nor is the new technology available to libraries (in the shape of computers and audio-visual materials). The proportion of post-graduate students in universities is to be slightly reduced, from 19½% to 17% by 1976-77. More students will be encouraged to live at home. The proportion of arts and social science students is to be slightly increased, a recognition of the fact that excellent arts candidates are being turned away while science places are proving hard to fill.

Libraries in higher education in general cannot look forward to a lavish future. More and more materials are being published, the probability is that costs will continue to rise (prices of books are much harder to control than prices of many other products, since each book is a new product, and one cannot lay down a standard price per page or per word), and student numbers will continue to increase. No institutional budget can for long increase at the same rate as the volume and cost of library materials; and this means that libraries will not be able to keep pace with this volume and cost unless they absorb an ever-increasing proportion of their institutional budgets, an impossible situation. In the face of all this, and the fact that several cities and large towns now have two or three institutions of higher education, there seems a strong *a priori* case for local cooperation. Somehow, one feels, there ought to be great scope for saving.

With this background we can now begin to look at comparison and cooperation. These can be considered under various heads:

1. Library materials.
2. Staff
3. Reading space
4. Equipment.

I will consider each in turn, although they are not independent.

The whole question of standards and comparisons is a difficult and often invidious one. There are no ideal standards laid down in heaven against which libraries can be measured. What usually happens is that the current situation is studied, the best features in it picked out and the worst identified, and a set of minimum standards put forward. These are not so much standards as targets – targets which have constantly to be re-set as the average provision catches up with the standards and the best provision goes well beyond them. The total lack of objectivity in library standards can easily be demonstrated by comparison of the United States with Britain, and of Britain with, say, India. What is riches in one country is peanuts in another.

Comparisons are much more difficult still than standards, because of the difficulty of comparing like with like. First, what is the standard unit of measurement to be? Library provision per full-time equivalent student? If so, this takes no account of the fact that research students need far greater provision than undergraduates, perhaps by a factor of 10. Is the unit of measurement library provision per member of teaching staff? If so, institutions with poor staff:student ratios may be penalised, and the amount of research being done by the staff is left out of account, as are also the research staff who do no teaching. Neither measure takes account of the vast differences in library needs between subjects. For example, law and medicine are extremely expensive in library terms, the former especially needing very large basic provision, let alone current expenditure. In 'newer' subjects such as biophysics and electronics, current library provision may be quite expensive, but retrospective provision is less important. Mathematics makes relatively

small library demands, either currently or retrospectively. In general, arts subjects need large library provision even for basic undergraduate needs, whereas science subjects need on the whole relatively small provision for undergraduates, but very large provision for research. In most subjects, basic library needs are not affected by whether there are ten students or 500, additional numbers merely increasing the need for multiple copies of some works. If one look at all the factors involved, whether in setting even partially objective standards or in making valid comparisons, one begins to despair of the whole business: number of subjects taught, ratio of undergraduates to researchers to staff in each subject, absolute numbers of students and researchers in each subject, specialities within subjects (some are much more expensive than others), volume and cost of publications in each subject – even the definition of subject (is 'economics' one subject or several?) In the light of this, the demands of polytechnic students that they should have equivalent library provision to universities, makes, without supporting evidence, no sense at all (quite apart from the fact that some of their libraries are spending much more currently than some university libraries). The most critical point is that the ratio of research students to undergraduates in polytechnics is much lower than in universities, and it is the Government's stated intention to concentrate research in the university sector in future. This affects not only current expenditure, but retrospective purchase. Undergraduates are on the whole not referred to much material more than five or ten years old, if only because the standard of texts tend to be revised from time to time. Researchers, on the other hand, need access to large amounts of older material, whether in monograph or periodical form.

It would be useful now to consider some of the facts of the present situation. There is great disparity between libraries in institutions of higher education. However, these disparities are as great within each type of institution as between them. This can be seen clearly from the following tables for university and polytechnic libraries:

TABLE 1

UNIVERSITY LIBRARY PROVISION 1969-70 *
(excluding Oxford, Cambridge and London)

	Highest	Lowest
Bookfund (£1000's)	144	12
Stock (1000s)	1,082	54
% of university expenditure	10.5	2.1
Book fund per FTE student	£44.6	£5.4
Books per FTE student	246.2	22.6

* Source: *Statistics of education 1969–70: vol 6, Universities* [2]

TABLE 2

POLYTECHNIC LIBRARY PROVISION 1972-73 *

	Highest	Lowest
Bookfund (£1000s)	165.5	30
Stock (1000s)	190	26
Periodicals received	2550	435
Staff:FTE students	1:34	1:180
Bookfund per FTE student	£51	£15.5
Books per FTE student	45.2	11

Variations between college of education libraries are not so great. For example, in 1967 the book expenditure varied from £2,250 to £12,345, and the size of bookstock from 21,000 to 68,000 volumes.[4]

As for comparisons between libraries in different kinds of institution, 13 of the 30 polytechnics now have a bigger bookstock than Bath University Library, 4 have one about the same size. The same goes for staff. It is true that Bath is one of the least well financed university libraries, but I have deliberately used the two measures in which polytechnic libraries are weakest – bookstock and staff –, and polytechnics are of more recent foundation, [+] so that the comparison is not an unfair one. The university libraries which have the highest figures for bookstock, both absolutely and per student, are of very long standing and rich in resources many of which are currently little used.

Current bookfund is a better comparative measure; and, making all allowances for the facts that polytechnics are building up their stocks, and that many have split sites, and therefore require much duplication, they do not come out of the comparison badly. It is colleges of education who compare badly with both polytechnics and universities.

It may be helpful to look at an actual situation. In Sheffield, the polytechnic and two college of education libraries are fairly close to national averages (for example, in bookfund per FTE student, Sheffield Polytechnic comes slightly below halfway in the league table). Although I do not consider expenditure per FTE student a particularly good measure, it is a reasonable rough comparative guide. Table 3 shows this comparison.

* Source: Polytechnic library statistics 1972–73 (unpublished)[3]

[+] They were of course developed from technical colleges, some of long standing – but so was the University of Bath.

(I am indebted for the figures on which these calculations are based to an MSc dissertation by Helen Moss).[5]

TABLE 3

EXPENDITURE IN HIGHER EDUCATION LIBRARIES IN SHEFFIELD *

(£ per FTE student)

	Total budget	Bookfund	Staff expenditure
University	41	18.6	18.5
Polytechnic	48.5	34	14.6
College of education 1	20	9.1	10.5
" " 2	19	8.7	9.5

* The university figures relate to 1970–71, those for the other institutions to 1971–72. The university figures should therefore be slightly raised to give a true comparison.

It is clear from this that the university library has fallen behind the polytechnic in total budget and bookfund, and the college of education libraries are well behind both. This may or may not be a temporary situation, due to the special stock-building funds given to many polytechnic libraries; we shall see.

I will now return to the four heads of comparison. First, then, library materials. From the viewpoint of the individual institution, library materials may be divided into three categories:

1. Materials that must be on the spot. These include nearly all materials required for undergraduate courses and for the teaching of undergraduate courses, and in addition a fair proportion of materials required by researchers – perhaps in the region of 70% of their total demands. These materials must be on the spot, first because of the sheer volume of demand on some works, which necessitates duplication, carefully controlled loan systems, etc., and partly because of the need for speed, particularly with undergraduate materials – if an undergraduate has an essay to do, he must have fast access to the books he needs for it. The 'volume of demand' and 'need for speed' arguments do not apply so strongly to research staff, but if the percentage of needed material that is available locally falls below a certain figure, firstly work is hindered and frustration sets in, and secondly it becomes uneconomic. If, for example, a certain periodical title is wanted so many times in a year and costs so much to buy, process, bind and shelve, it is possible to calculate whether it is cheaper to buy or borrow – and in many cases it will be cheaper to buy, quite apart from the question of frustration.

2. Materials that must be available somewhere in the locality for consultation, whether because they are needed to satisfy enquiries that must be met on the same day,

or because of the nature of the material – for example, major reference works, and material such as law reports.

3. Materials that can be borrowed from elsewhere, whether because they are needed only very occasionally, or because, although they may be needed more than occasionally, it is not economic to provide them locally.

In choosing to look at library provision from the viewpoint of the individual institution, I realise that there are other ways of approaching the problem. One might, for example, try and assess the total needs within a locality, then consider how they can best be satisfied, calculate the resources needed to meet them, and finally consider how these resources can be rationally allocated. However, this would be a somewhat unreal exercise in the best of situations, and with separate financing for the university and non-university sectors, it seems altogether more sensible and realistic to start from a local library situation.

My first category of material, that which must be available on the spot, causes in theory relatively few problems. Material required for undergraduate teaching courses is relatively easily identified, although there is the serious danger that not only are reading lists issued by lecturers constrained by the local library provision, but the horizons of lecturers gradually become restricted as well, so that they may be unable after a few years even to construct a reading list they would <u>like</u> to give to students. It would be fruitful to compare lists for similar courses in different institutions, of the same and of different types, and study the differences that occur; it is fairly certain that they would be substantial. However, provided that the lecturer's horizons are sufficiently broad, and he is able to stand aside from the current local constraints, basic undergraduate provision should not be too hard to establish.

It is relevant here to recount the experience of Lancaster University Library. By careful planning of loan and duplication policies, the availability of material for undergraduates was increased very substantially within a year or two. This increased availability was maintained for a time, then it began to drop again. The reason for this is that expectation had been increased by availability, and this had caused the availability level to drop. This is particularly interesting because Lancaster University is spending a higher proportion of its budget on the library than almost any other university in Britain; and in spite of this, the library can still show that a fair proportion of undergraduate needs are not being met. Exercises of this type are of far more value in establishing the provision that libraries ought to be making than the usual attempts at establishing standards. The great strength of such studies is that they combine the scientific analytical approach with practical and empirical factors. They are also politically valuable, since it is far more convincing to show one's institutional masters that one is failing to meet known needs, than to put before them arbitrary standards, constructed by however august a body.

Materials wanted by undergraduates for their courses must be on the spot in local institutions. It is no good telling an undergraduate that he can get it a mile away in another library.* For one thing, he would have neither time nor inclination to go there as frequently as required – much library use is squeezed in between lectures. Secondly, if he did go there, he would probably find the books in use by the institution's own students. Every higher education library should have some of its stock confined entirely for the use of its own members, and not usable by anyone from elsewhere, except for incidental consultation. This applies even when multiple copies are held, for if a particular item is in such heavy demand that multiple copies are needed, it is unlikely that a nearby institution studying the same subject will not need to have at least one or two copies of it.

The problem of research provision is very much harder. Several attempts have been made to carry out "availability surveys", [7,8] with not very great success. However, although it may be hard to identify all the potential needs of researchers, it can be ascertained what they ask for most frequently, and it may be best to proceed on an empirical basis, as Lancaster did with undergraduate provision. That is, a fairly crude availability survey can indicate what percentage of wanted materials the library is able to supply at a given time. It can also help to identify items that are most wanted and therefore prime candidates for purchase. If extra finances can be obtained to bring local provision up to a better level, this will almost certainly increase the demand; one can then test availability again, improve provision again, etc.** It is important not to expect final answers immediately; indeed, final answers would be impossible, since the situation is always a dynamic one. If, however, one can improve provision according to demonstrable demand, the library services can gradually be improved and move ever closer to serving the real needs of the users, at the same time as the needs develop in accordance with better provision.

For this category of material, each institution must make its own provision – and, in the case of basic undergraduate books, keep it largely to itself. However, in making

* Or even that he can buy it. Even if most of them do, some will not, and at least one or two copies of even the most basic works should be in the library.

** Incidentally, crude use of published journal rankings is to be shunned. These rankings commonly show that, say, 15% of journals account for 80% or 90% of the usage, and the top 15% are often listed. To take the top 5, 10 or 15% (according to one's resources) would be a mistake, since none of the published studies relates usage to cost. I have in fact re-analysed some published data according to the subscription cost of each journal, and found the resulting rankings markedly different – not surprisingly, since some journals are extremely expensive and others are very cheap, and the latter may be the better buy even though they account for a smaller number of uses. Ideally, all such studies should be carried out by each institution on its own local uses, and take into account not only subscription costs, but processing etc. costs.

essential research provision for itself, it may be making marginal provision for other institutions: in other words, one institution's category 1 may be another institution's category 2 or 3.

My second category of material, items that should be available locally but need not be on the spot, is easier to identify. 'Same-day' needs will be rare – they are commonest in industry, and do not concern academic libraries so much; where they do, they are mostly unpredictable, and provision cannot therefore be made in advance, so that stock-building is not affected. Material which needs to be consulted rather than borrowed includes *Hansard, Halsbury's Statutes, Chemical Abstracts,* etc. Material of this kind is not suitable for borrowing from elsewhere, for fairly obvious reasons, including the fact that precise references are often not known. Much of the material consists of large sets which require little or no effort to make known to other libraries, in contrast to most library materials. (Materials of this kind may of course be needed on the spot, if local demand is sufficient; if they are wanted on the spot in three or four institutions in the same town, they should be provided on the spot. My point is that if they are not on the spot, they cannot be borrowed, and if there is any demand, however small, provision in the locality is necessary).

Relevant factors deciding whether cooperative provision for this material can in fact be made are:

1. Distance. Distance can be measured in terms of miles, or in terms of travelling time (which probably differs at different times of the day). Travelling time is or should be the most relevant measure, but in fact physical distance has a psychological effect. An institution which is an hour's walk away may seem closer than one which is one hour's bus ride away, and is therefore more likely to be used. On the other hand, if the bus goes from door to door, especially if it is laid on specially to serve the needs of students, the psychological advantage is the other way round.

2. Communications such as telephones and telex. Many uses of this kind of material can be made by phone or telex, provided there are enough machines and staff.

3. Services provided. For example, will institution A do a search in *Chemical Abstracts* for institution B? If so, is there any need for institution B to hold it?

At any rate, this category of material is a very limited one, a good deal smaller than the on-the-spot category and vastly smaller than my third category.

My third category is material that can be borrowed from elsewhere. In effect, the whole field of knowledge may be wanted by someone or other sometime or other, so that the overlapping demand between institutions of higher education in one area is, in theory, total. As already noted, the precise cut-off point between local provision and borrowing has to be determined in the light of several factors, with cost as a prime factor.

But it is now fully accepted that any institution of higher education will be satisfying a large number of its needs through interlibrary loan; some libraries are now obtaining over 10,000 items a year in this way, representing up to a quarter of all their issues.

In making necessary 'on the spot' provision for itself, an institution may, as already noted, be making marginal provision for other institutions. The question then arises whether it is desirable or economic for the other institutions to obtain this material locally or through the normal interlibrary loan channels. Normally, it is as quick to borrow from Boston Spa as it is from any local library. In the first place, the user does not have to move from his local institution. (A local or regional service could of course also spare him movement by operating a van between all the institutions). Secondly, the British Library Lending Division is geared entirely to interlibrary lending, whereas local institutions see as their first responsibility the serving of their own members. Thirdly, an item is more likely to be available at Boston Spa, partly because it is less likely to be on loan (most periodical articles are photocopied and therefore constantly available, and items in heavy use are duplicated as required), partly because there is no direct access by users to the shelves, so that misplacing and losses are very rare. Fourthly, access to the contents of other local libraries necessitates the making of union catalogues, which are expensive to construct and use, never quite up to date, either with accessions or withdrawals, and generally cumbersome. At any rate, it is normally much simpler and quicker to send any request to Boston Spa than it is to check a local union catalogue with all its known imperfections, and with a fair chance that the item will not be available anyway.

It is difficult to compare local loans with national loans for cost. If all costs were taken into account, there would probably be little difference, but the apparent costs are usually less. For example, pre-paid forms are not required, items may be fetched individually rather than being added to a postage bill, etc. I do not know of any adequate comparative costing of the two services, but if the three criteria we are trying to use nationally to decide between alternative systems are used, I suspect that national loans will come out rather better.*

Although my thinking may be biased by my association with the British Library Lending Division, I do suggest that when there are two or more institutions of higher education in a locality, and when institution A has, by providing for itself category 1, an item in category 3 that institution B wants, B would normally find it easier to get it from Boston Spa than from institution A. I should make it clear that I refer only to the British situation, where a two-tier system, local provision backed directly by national provision, is effective, rather than to other countries where a three-tier system (local-regional-national) is a better proposition.

* The three criteria are cost, speed and satisfaction level. These three criteria can be reduced to two factors: probability: speed, and probability:cost. They can even be reduced to one, but this is too complex to explain here.

I have been talking about borrowing, but there may be great advantage to users, whether researchers or undergraduates doing projects, in having access to another library for consultation and browsing – for working in a richer, or different, collection than their own. Not all of the use made by a chemist of chemical journals will be of specific known items; he may want to scan current parts or even back runs. All that is needed is reciprocal membership of libraries – something that many libraries, or their committees, have been reluctant to give, for reasons that are generally unconvincing. Provided that the basic undergraduate stock is safeguarded, the benefits surely outweigh any disadvantages there may be.

Since most university libraries are fairly well established, and make reasonable research provision, cooperative arrangements of this kind, whereby libraries in higher education open their doors to other institutions, would work very unequally, since demand would fall very heavily on the universities. It is unlikely that polytechnic libraries, still less college of education libraries, would be able to offer much in return to the universities. This situation in itself is likely to cause difficulty, since universities would in effect be spending funds on offering services to other institutions, with very little reciprocity; while polytechnics would resent it because they were not getting money to make the provision for themselves. The dual system of financing, in this as in other ways, is likely to bedevil many aspects of cooperation. In theory, there is no reason why polytechnics should not give some money to university libraries in return for services, but politically and practically this seems very unlikely indeed.

For the likely extent of dependence, I turn for evidence again to Sheffield, to the local cooperation study sponsored by the Department of Education and Science.[9] Using Orr's Document Delivery Test [10, 11] with a sample of citations from academic journals in subjects relevant to the institutions examined, Tom Wilson and his team have shown that the 'Capability Index' of the university was increased only slightly if the resources of the polytechnic are also brought in; whereas the Capability Index of the polytechnic increased by a factor of about three by use of the university library. A high proportion of items held by the polytechnic library were also in the university library, whereas only a small proportion of items in the university were also in the polytechnic. Now if I am even approximately right in my thinking, university libraries would, in a rational world, where every library received resources according to demonstrable need, be spending much larger amounts than their neighbouring polytechnics and colleges of education (or whatever they may be called in the future), mainly because they are already established and because they are serving a much greater quantity of research needs. Strength would be built on, and resources would go where they would receive most use. Members of other institutions of higher education would use them for some consultation, and for the occasional loan. However, most of the needs that were not met on the spot would be met by inter-library loan.

We are not in a world which is operated entirely by logic, and a pattern such as

this is highly unlikely. Whatever the arguments, it is nevertheless bound to seem unfair to a polytechnic that it should be spending far less on library materials than a university with an equal number of students. What is therefore likely to happen is that polytechnics will improve their library provision to somewhere near the level of universities. If so, and if polytechnics are able to justify this library expenditure in terms of user need and satisfaction, it almost certainly means that university libraries are underprovided. Alternatively, one might have cooperative arrangements whereby certain scientific journals, for example, were bought in the polytechnic and not in the university, even though the bulk of their use was in the university. A further alternative is a joint library, perhaps confined to advanced materials. Apart from the problems of joint financing, this may, unless the sites of the different institutions are very close together, inconvenience large numbers of users who have to travel to satisfy many of their needs. (One thinks of the reluctance of academics in a department to go 200 yards to the main library).

Polytechnics are likely to challenge the Government's proposal that research should be concentrated in universities; indeed, a certain amount of research is being carried out in polytechnics already, and library provision must be made for this.

In making my various comparisons and suggestions, I must emphasise that I am not saying that the polytechnics are spending, or are likely to spend, too much on their libraries. What looks a real possibility is that university libraries may come badly out of the future situation.

I have up to now been talking in rather general terms. There are two specific trends which are likely to affect libraries in the near future. The first is that project work is becoming more popular for undergraduates, and this is bringing their library needs into the foothills of the research mountain. Some of the material they need for this will not be available on the spot. Also, project work in polytechnic degree courses will strengthen the case for research provision in polytechnics, and will thus go some way towards countering the points I made above. A second factor is the coming reduction in the staff: student ratio in universities. As this happens, either staff will be getting less time for research, or students will be thrown more on their own resources and receive less teaching. In the former case, staff time will become more valuable and library services of an information type will become more important; in the latter case, the library and its resources assume a more important role in the total educational function of the university, as the students will be obliged to teach themselves more. They will also require much more in the way of audio-visual aids of a self-help type than previously.

As new institutions are founded or upgraded, their libraries customarily receive special support to build up a basic stock. What often happens is that the librarian has rather more than he knows what to do with for two or three years, and is then faced by a period of severe famine. If he had staff enough, and enough cooperation from teachers, it might not be difficult to spend the windfall wisely; libraries sometimes get stocked with

large quantities of standard bibliographic resources which subsequently remain unused. This is partly because librarians know bibliographical literature much better than other literature, partly because librarians tend to assess other libraries by examining this part of the stock, with the result that it may receive undue emphasis in stock building. But in any case, desirable though it is to build up a good basic stock, it is only in certain research areas that this is really essential (e.g. historical source material), and it is current intake that is really important. Much undergraduate material outdates very quickly as it is superseded by new editions, and what was not bought five years ago really does not matter very much now.

One of the reasons why I favour a two-tier system, with national provision as an immediate backstop to local provision, is that cooperative acquisition systems, if they are to work properly, require much more money to operate than they save through avoidance of unnecessary overlap. It may be that I have overstated the likely performance of the British Library Lending Division, and that backstops to it will be needed. There will in fact be backstops, in the form of the regional ISBN catalogues, but these are confined mainly to public libraries, and with the future regional pattern in an evolving situation, I think it would be unwise to extend them beyond public libraries.

There are really two separate questions: cooperative access, and cooperative provision. The first requires union catalogues, as up-to-date as possible, since it is often the most recent items that are most heavily wanted. When Boston Spa fails, as it will from time to time, it is less costly to make the occasional speculative phone call to a local institution than to maintain a union catalogue; even a catalogue using ISBNs rather than author/title records costs something to construct and maintain, and it is also slower to consult than an author/title catalogue.* If the pattern I have suggested as sensible were followed, it would means that records of items in my category 1 – needed on the spot – would not be made known to other local libraries, but items in category 2 – materials such as Hansard etc. – would be recorded and made known. Since this is a small category, it should be simple and cheap to make the appropriate records. If desired, a local union list of periodicals can be constructed; this may become much cheaper and simpler in a year or two, if, as we hope, a national serials data base in machine readable form is built up under the auspices of the British Library.

If a cooperative acquisitions system is to screen every title coming into the system, it is almost impossible to conceive of this being done except by an on-line computer system. This is the system being developed in Scandinavia – the LIBRIS system – whereby research libraries will look up the machine data base on-line when they want to order an item or require it on interlibrary loan. If the book is already in the system, and they still want to buy it, they can use the record that is already there. If they

* If academic libraries contribute to the regional ISBN list, it would certainly be worthwhile printing out sub-lists for a locality.

do not wish to buy it, they can obtain a location by this means. If it is not in the system at all, they can order it and record it for the use of other libraries in the future. This system makes a great deal of sense in Scandinavia, but not in Britain, where the whole lending pattern is completely different. However, while cooperative acquisition title by title may not be sensible, except perhaps with very expensive sets (when it is quite simple for one library to phone another, or where occasional meetings of the librarians involved can discuss lists of expensive desiderata), general cooperation may still be desirable. For example, if a polytechnic is covering polymer technology as a special interest, whereas it is only a fringe interest in the university, it would be sensible for the polytechnic to make the basic provision of research journals on the subject, and for the university to use them as required.

Although I have been talking almost entirely in terms of conventional books, the same considerations apply equally to non-book media. Here, as with books, there will be few items which fall between the two categories (a) must be provided on the spot (b) can be borrowed nationally. In saying this, I am of course only too conscious that the British Library Lending Division makes as yet no national provision in this area, but publications such as HELPIS[12] already make available the audio-visual resources of one institution to others.

Another area of cooperation in library materials is cooperative storage – on the face of it, a very attractive idea. However, I suggest that cooperative storage is useful only when three conditions are met:

1. That space has run out, or is needed for other purposes. in at least one of the cooperating libraries,

2. That the items stored are sufficiently in demand to justify the clerical procedures involved transferring to store and the other costs of storing,

3. That the store is equally, and quickly, accessible to all the institutions.

It is not often that all these three conditions are met, particularly the second condition. If an item is not wanted sufficiently on the spot to justify its retention there, but is pushed out on grounds of space and low usage, it is doubtful whether it is more sensible and economical to store it locally than to dispose of it to the British Library Lending Division, from where it can be borrowed quickly whenever required; the British Library Lending Division will keep at least one copy of every book donated, often two copies. Cooperative storage requires the alteration of the records, and, if they are to be made available to all the institutions, their distribution as well. The books themselves have also to be altered. However, this is still an open question, one that is being currently studied by Newcastle University Library. Here again, one cannot neglect the politics of the situation. It may simply not be politically possible to dispose of books entirely; and in such a case, a local cooperative store can be regarded as a temporary resting place for books on their way from a local library to the BLL.

To summarise my main points about cooperative book provision. Most items wanted by users either must be provided on the spot, or can be borrowed nationally. There remains a relatively small category of material for which borrowing is not possible, and which can in some circumstances be provided cooperatively; it is a small task for each library to make this material known to other local libraries. For the rest, while physical access for consultation and occasional loan should be as free to other institutions as possible, neither cooperative acquisition schemes nor local union catalogues are justified. Cooperative storage is probably less cost-effective than national storage. The scope for local cooperation is therefore very limited, and any savings due to cooperation are likely to be small.

For evidence on local cooperation in staff, I turn again to the study by Helen Moss, which compared the staffing of the major libraries in Sheffield, including the City Library. The staff situation in each type of library in Sheffield compares pretty favourably with national standards, so if anything is at fault it is the national standards. For this reason, the Sheffield data are rather useful for my present purposes. Table 3 shows that the polytechnic library is less well off than the university library, which has a much larger stock and system to manage. The college of education libraries compare badly with both, and there is no obvious rational explanation for this.

As with library stock, there is and can be no absolute standard of staffing. If we want to make comparisons between different institutions, we can make these on several grounds:

1. Levels of staff
2. Salaries of staff
3. Total staff expenditure
4. Ratios of staff:other library expenditure.

Levels of staff, expressed as ratios of senior:junior or professional:non-professional staff, are fairly equal in the higher education libraries. In fact, this equality may represent a somewhat unsatisfactory situation, in that in a smaller library, a rather high proportion of professional staff may be needed, partly because there are no economies of scale, partly because even if only a small proportion of duties are professional, there is a minimum number of professional staff one needs to carry these out, even though these staff may subsequently find themselves engaged on much routine work. However, assuming that similar services should be given by the different institutions, there appears to be no particularly unfavourable comparison here.

Salaries are normally related to the salaries of the teaching (and perhaps administrative) staff. There is of course inequality between different institutions, an inequality which is strongly opposed by polytechnics. I do not propose to get involved

in this controversy. It may, however, be pointed out that the inequality in salaries of library staff does lead to some rather odd situations. Individuals can often get more senior and better paid jobs in a polytechnic or college of education library than in a university, simply because salaries are lower and this makes recruitment criteria lower. It may work out unfairly at the top, where similar responsibilities are not equally rewarded; the task facing some of the polytechnic librarians, with multiple sites, is particularly formidable at the present time. A further consequence of unequal salaries is that transference between institutions becomes more difficult, and when it does occur one may find a librarian in a polytechnic accepting a deputyship in a university library, or an assistant librarian at a university library becoming a librarian in a polytechnic; this can be an unhealthy situation. On the ground that one should grade the job, not the individual, the critical questions are whether university librarianship (a) demands higher academic qualities to serve a larger research clientele, (b) carries a heavier management responsibility, than a polytechnic or college of education. As I suggested above, the answer to the second question is almost certainly 'no', The answer to the first question would be 'yes' in terms of conventional thinking, on the grounds that the librarian has to have higher academic standing in a university, has to be a scholar in his own right, etc. However, this view is now changing, to that of a librarian who can hold his own academically, but who is basically an administrator – rather like the Vice-Chancellor on a lower level, in fact. The present situation, therefore, while it may not be too bad for individuals, except at the top, works our unfairly for the non-university institutions, who are likely to have a rather poorer choice of staff, or at least staff who would go to a university library if they could get in (having taken a polytechnic or college of education library as a second best, they may in fact turn out a lot better than some people who get into a university library first time, but that is another matter).

Total staff expenditure needs to be related to some other factor, if only the number of students or the total institutional budget. In fact, it is useful to consider this together with my fourth standard of comparison, ratio of staff:other library expenditure.

The first question to ask is why staff should be related to other library expenditure, or to any other university factor at all. Thinking purely of a basic library service, the staff required can be calculated on two bases:

(a) to process current intake (b) to manage existing stock.

One should be able to compute the number, type and cost of staff required to operate a library of a given size, with a given number of users. This is quite independent of the size of the intake, and indeed if a library never bought another book, it could still not dispense with all its staff – this is what makes the commonly used ratio of staff to other current expenditure such a poor measure. In the usual situation of growth, both of stock and of student numbers, the number of staff would require to grow, though not in a linear manner (because of economies of scale). The staff required to handle a given number of acquisitions can alsc be computed. There may be some growth here, but the growth

factor may not be the same as that for the management of existing stock. These two separate staff computations have not yet, to my knowledge, been made, but this is an exercise that is badly needed.

However, these calculations give only the staff required for a basic service, and even then it does not take into account the possible rationalisation of staff. I feel rather strongly that if library staff in academic institutions are to enjoy full academic salaries, they should be shown to be doing equivalent jobs to academics. Among equivalent jobs I would not list cataloguing and classification, except for supervisory work, and for handling exceptionally difficult cases or languages. I would regard upper middle and senior management, and information service work, as equivalent academic work. I would therefore argue for a three-tier library staff structure, with senior staff on full academic scales, preferably academically and professionally qualified; intermediate staff on scales related to public libraries, preferably professionally qualified, and possibly including a fair proportion of graduates; and junior staff, whether library assistants or clerical staff or whatever, mostly unqualified. Many university library systems that I have seen could be so rationalised that either the same services could be given for rather less money, or fuller services given for the same money. New job definitions are urgently needed for library work.

A librarian is often in a particularly difficult position when arguing about staffing. On the one hand, he may want to prove to his institution that he has very low unit costs, and to do this he must pare his staff to a minimum. On the other hand, he may want to show that he has at his disposal a large number of expert staff, whether to keep up with the academic Joneses or to impress other librarians. It really depends on the sort of service a library is aiming to give. Provided objectives are analysed in the right way, there need be no inconsistency. In routine library operations, a librarian may be able to show high productivity and low unit costs. In R and D, general planning, and information services, where productivity and unit costs mean very little, he will want a fair number of high level staff. Until one knows precisely what services a library is aiming to offer, or indeed claiming to offer, comparison means very little. Otherwise, one may be comparing a university library operating a high level custodial service with a polytechnic with a small stock and a smaller number of students, but giving a full-blown information service to staff.

In addition to the factors I have mentioned, there are such complications as split sites, departmental libraries, etc. These complicate the issue, but are not central to it, and allowance for them can easily be made in addition to the basic computations.

What scope is there then for cooperation? First, a point I have already mentioned – movement of staff between different institutions. At present, universities tend to be able to take their pick, though I am not sure they always do best in the long run. This question cannot be satisfactorily solved until salaries are nearer equality.

Secondly, there could be short term local exchanges or secondments. The reasoning behind this is that experience in any other library adds to one's own knowledge and enables one to see one's own service more objectively; there is no library from which one cannot learn something, however small. Exchanges or secondments would of course also increase knowledge of other local resources, as well as fostering a corporate spirit. It should not be too difficult to make arrangements of this nature, although differences in scales could cause some embarrassment.

Thirdly, each library is likely to have available to it some special expertise – in languages, in subject knowledge, or in technical knowhow (e.g. in microforms, educational technology, etc.). It might even be possible for some appointments to be made with this in mind; for example, a meeting of local librarians may decide that some special expertise in the construction of audio-visual aids is needed, and an appointment may be made to one of the libraries on the understanding that his or her services are available to the others. To be more realistic, there is a fair amount of expertise available in libraries at present, and this can often be profitably exploited.

Fourthly, cooperative in-house training could be highly desirable. The staff surveyed by Helen Moss certainly thought that cooperative training was desirable, especially those who had experienced it. This could be done either for junior staff, as part of their routine library training, or at intermediate or senior levels.

One kind of special expertise is systems analysis and programming. Every library must surely have its own systems analysis expertise in one form or another – it will become a more basic requirement than cataloguing skills; and programming has to fit local computer requirements. However, a systems analyst in a library can be rather lonely, and an informal team of systems analysts, each belonging to an institution of higher education in the area, could be very beneficial, both as a stimulus to the individuals and to the libraries, which would thereby have available to them a larger fund of knowledge and expertise.

Similar considerations apply to the most senior staff, whether senior managers (heads of technical services) or policy makers. No system of cooperation, whatever it involves, can operate without personal goodwill and reasonably close acquaintance between the individuals concerned, and even the best system can be improved if one is able to ring up someone one knows personally.

The other possible areas of cooperation can be dealt with very much more quickly. Reading space in libraries is most heavily occupied between lectures; library occupancy in the evenings, although it varies, is usually far less heavy than during the daytime. During the day most students will be in their own institutions, and will not therefore normally wish to use libraries in other institutions anyway. If, therefore, library reading space is adequate during the day, it is more than adequate for the evening, and

there is no reason at all that I can see why students should not be able to use reading space in another library if it is more convenient or closer to where they live. The fact that more students will be encouraged to live at home may increase evening usage.

While every institution wants to keep its library open during the evenings in term-time, and possibly at times over the weekend as well, full weekend opening and evening opening in vacations does raise great difficulties in staffing. In fact, it is extremely difficult to justify full evening or weekend opening in vacations. It might be possible to arrange that at least one of the libraries in institutions of higher education in a locality was open each evening of the week all the year round, and for some hours during weekends – rather like the system pharmaceutical shops operate overnight and over the weekend. This is something well worth examining. It would be particularly important to try and establish the type of use, since if most of it proved to be by researchers, they would obviously want access to the library with the best research provision, and it might then be more sensible for polytechnic and college of education library staff to help keep a university library open than to keep their own libraries open for extended hours.

Finally, cooperation in equipment and facilities. Machinery such as offset litho equipment will probably be available within each institution, and so will equipment for making non-book media such as tape-slide presentations. I am thinking of more sophisticated equipment such as microfilm making and copying equipment, where the best equipment for a particular job may be too expensive for one institution to justify. Machinery for making, for example, hard copies at reasonable speed from microfilm, such as the now extinct Copyflo, would be useful if it were available, and not every library would be able to justify the high-speed xerox copiers.

It is in use of computers that cooperation may appear most attractive. There are in fact various options facing libraries wanting to automate:

1. Dedicated library machine
2. Institutional machine
3. Machine shared with other libraries
4. Computer bureau
5. National (British Library) computer.

It depends partly on what you want to automate. If it is the issue or acquisition system, local access with minimal delay is essential, and use of a British Library computer would not be sensible. If it is a catalogue system, then the whole system can be contracted out to the British Library, as in effect Brighton Public Libraries have done with their BriMARC system.[13] This is a matter now being studied in detail by Aslib, and I would not like to anticipate its conclusions, particularly as these will be only provisional, lacking as we do many of the facts and figures required. The best that can be said at present is that a library computer shared between several institutions in one locality is one

possibility among several, and not, in my view, the most attractive.

I have, I know, been rather conservative in my approach to local cooperation. I do not think this is due so much to my natural caution as to a combination of personal experience and logical thinking (whether or not my own logic is wrong). When I was Librarian at the University of Bath, I tried hard to see that cooperation was possible, both with Bristol University and with the local public library and college of education library. In practice, it was very hard indeed to find any really valid area where cooperation could be more than marginally effective. It was useful to know that Bath Public Library had one or two expensive reference books that Bath University Library did not, and vice versa. It was doubtless also useful for Bath Public Library to know that we had a complete set of *Chemical Abstracts*. It was of very little use to know that Bristol University Library, 13 or 14 miles away, had vast quantities of material we could not have, since it was better to get them from Boston Spa when wanted. As for my logic, I have tried to expose my reasoning to you in some detail, so that you can pick holes in the arguments or facts. What must be challenged are the popular ideas that cooperation is somehow a very good thing in its own right, whether or not it serves any useful purpose, and that it will save large sums of money.

As I warned you, I have been able to say very little about college of education libraries, because they are in a state of flux. For those that will join universities or polytechnics, or will close down, there is little to say in any case. There is not much more to say for those that remain teacher training colleges. The great uncertainty is for those that become institutions of higher education in the arts and social sciences; until it is known exactly what subjects will be covered and in what depth, and how much research will be done, quite apart from the question of how big they will be, it is extremely difficult to say what standards (or targets) should be aimed at, whether comparisons with polytechnics or universities are valid, and how far existing resources may be adequate to meet new needs. Some preparatory work needs to be carried out, and I am sure is being carried out, on requirements for these new institutions, but meanwhile they must remain a large hole in any attempt at making comparisons and studying the scope for cooperation.

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LIBRARY PLANNING AND DESIGN, I.

by

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I imagine that most of us who are here, especially the librarians, have our own vision of the ideal library. A library is a building and a collection of books, but it is many other things besides, according to its particular place in the community, its special function, and the pattern of librarianship set by its staff. No two libraries are alike. The building determines the organisation of the library service, so it is vitally important that the Librarian should know exactly what he wants, and why, and should be consulted at all stages of planning and construction.

Many of us, when we were appointed, were presented with buildings not really suited to our needs because those concerned with their planning had not understood or considered sufficiently the functions of a College of Education library. In the last ten years teacher-training has undergone many rapid changes, and many more will follow as the White Paper recommendations are implemented, and it is essential that library buildings should change too, not only because they are too small, but because they are unsuitable for the role they are now called upon to play.

A number of colleges have recently had entirely new buildings, but others are making do with extensions and reconstructions. In any kind of library planning the principles involved and the problems encountered are likely to be similar, whether the building is new or adapted. The Librarian must be prepared to spend a great deal of time and thought on the building – must live with it, in fact – and the library staff must be able to carry on with the day-to-day running of the library, seldom knowing when the Librarian will be available. With extraneous duties taking priority, with mud outside the doors, and noisy machinery at the windows, the Library must continue to give as full and uninterrupted a service as possible. Until a crisis arises no-one would flatter us by saying that the Library is indispensable, but as soon as a temporary closure is threatened it becomes of paramount importance, and we are told that College cannot function without it. So somehow, whatever the difficulties, we must continue to provide a service.

Any building site is dirty and noisy, but the reconstruction of a building is infinitely worse, for the dirt and noise are inside as well as outside, access is difficult or even impossible, and attempts to carry on as if conditions are normal stretch one's ingenuity and nerves to the uttermost. In Cardiff, while walls were removed on the lower floor and a porch added, we had to move all library service upstairs and function in half our space for six months. Fortunately we had an emergency exit which could be used as an entrance. The lower reading-room was approached only through the hazards of builders' clutter, and all readers were strictly forbidden to go down below. Library staff made forays once each day, armed with requisition slips, and returned bearing loads of books ingrained with dust and dirt. One intrepid student, unaware of difficulties, tried to come in through the usual entrance. She slithered through the scaffolding in the doorway, and found piles of builders' rubble in the lobby, the counter gone and no staff to be seen, but hearing voices above she continued on her way, clambering over a 6-foot radiator

which barred the staircase. She showed no surprise, and attempted to leave by the same exit!

Already I am speaking of my own experiences, and this may not be very helpful to you, but I am hoping to be able to make you see that if you cannot have a new building there may be ways and means of extending and altering the most unpromising of old ones.

I expect some of you will remember the Cardiff Library, for at least it is memorable! It is circular, on two floors, with books round the perimeter, and with certain architectural features which always excite comment. It is notable for being different from the rectangular glass boxes of its period, and it has dignity. Visitors entering the door used to say, "What a beautiful building!" while librarians shuddered and were full of pity for anyone having to cope with a small circular building where re-arrangement is virtually impossible. It was too small, it was the wrong shape, it was dreadfully noisy and distracting, and the entrance was so cramped that no more than four people at one time could approach the desk. There was no lobby, and people coming in were plunged instantly into the silence of the reading-room. Despite all these problems, I have an affection for the place, and I was pleased when the architect decided that expansion was possible, even though the thought of a completely new library building, purpose-built, was very attractive. It was decided that the cost for that was too high, and we must "make do."

The first problem was where and how to expand. Fortunately the building is not a complete circle, it is a kind of bulbous excrescence on the end of a two-storey rectangular block. The upper part of this block had been added to the Library area, with some alteration, in 1967, but the shape is awkward because it is too narrow, and it provided no more than an additional 1100 sq. ft., including a corridor. We considered using the lower part of this block, but it was too small to be worth converting as a whole, though the part nearest to the library, which has been used to create an entirely new entrance area, was one of the two necessary keys to the reconstruction plan. The main extension was conceived as another rectangular block at right angles to this one, leaving the circle as the apex. I am not going to describe this further because you can study the plan and the pictures. Having decided upon a suitable way of extending the original building, we were lucky in that we were able to design a library which has a strategically placed issue-desk/control area, a catalogue hall, spacious and inviting, which is central to all four reading-rooms, a School Practice library, and a display room, both of which can be used for library teaching, workrooms conveniently placed for the assistants' work of receiving books, ordering, cataloguing, etc., and for exercising some supervision over various parts of this extensive building. The old wing upstairs, added in 1967, is conveniently situated between the School Practice library and the Educational Technology area, so it is ideally suited to the storage and examination of Learning Resources. The book-stock is now divided into subject groupings in four separate reading-rooms, and there are possibilities for expansion of both the new reading-rooms when this becomes necessary.

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And now I'm going to move on, or rather, go back, to some of the nitty-gritty of living with a new or reconstructed building from the planning stage to completion. Of utmost importance at all times, is close co-operation between Principal, architect and Librarian. Happy the Librarian whose Principal shares his enthusiasm and concern for good library provision! At all stages this is important, but especially so in the early days when the Library's needs have to be weighed against those of other departments. Some Heads of Departments exert tremendous pressures on the Principal, and I would be surprised to hear of a College where the majority of staff put library needs before departmental ones. So first there is the problem of keeping one's end up in order to get a fair share of the overall allocation of space and money for College building, and in this the Principal's attitude to the Library is obviously of vital importance. Once plans are mooted, the Principal's confidence in his Librarian is shown by his readiness to involve him in direct consultation with the architect, for it is only through the Principal's intervention that these two can meet and confer, either now or at any time during the building period. Because all suggestions or complaints must be channelled through the Principal, it is important that the Librarian should have ready access to him, but Principals' time is very heavily committed, so that it is often inconvenient or impossible to have an urgent interview, however brief. Speaking from my own experience, I know how vital this accessibility is, and I am very grateful to my own Principal for his efforts to make himself available whenever I needed him. Arising out of this is the need for the Librarian to realise that he must not change his mind and try to alter design or details once the plans have been passed and the building costed unless something vitally necessary arises. This can be a sore trial, for the Librarian must be able to visualise exactly how everything will look and he needs not only foresight, but courage, to have confidence in every detail originally decided upon, when the contract will probably take three or four years to complete. Architects, quantity surveyors and dispensers of money do not take kindly to alterations for obvious reasons, and one of the best ways of cutting these to a minimum is to have very close consultation in the planning stages. When planning, the Librarian needs to have a very clear picture in his mind of the building he hopes to see – to weigh carefully the relationships of various areas one to another, and the square footage allocated to each. Perhaps the most contentious area to design is the working area for library staff, for it seems that everything else must take priority. We must have space for readers and space for books, but only the very minimum – whatever is left over – for those working processes which make the Library function. I have seen handsome libraries where the staff work in extremely cramped conditions, in places which are little more than corridors or cupboards. Library workrooms need to be larger than ordinary offices, for books are bulky, and so are parcels, and space must be found not only for clerical work, but for processing and packing, and other jobs more appropriate to a workshop than an office. Library staff work long and irregular hours, and are entitled to adequate working space in rooms which are light, airy and pleasant.

Having considered areas, the Librarian should then spare a thought for foundations

and floor stresses, for books are very heavy, and though the architect does not need to be told this obvious fact, he should be asked to make provision for one or more floors to be added, if this is feasible, when further expansion becomes necessary. The Librarian must also consider how quietness can best be achieved, by careful routeing of the library traffic, and by discussing with the architect what kind of flooring is to be used, not only in reading-rooms, but also on staircases, for many women students, if fashion so dictates, clatter up and down on wooden clogs, platforms, metal heels, or whatever else is the "in thing", disturbing all but the most secluded readers. You envisage quiet reading-rooms, but it you are not careful the doors will click, or clang, or else stay wide open, every time anyone goes through. You can't keep on saying to students, "Please close the doors quietly." To give you an example, in an effort to cut down noise I asked that our circular reading-rooms should have glass screens and doors to cut them off from reception areas, and I envisaged free swinging double doors which would push in either direction, but because I did not mention this, we have to submit to push-pull doors – heavy, handsome mahogany doors with glazing – which open only one way, and inevitably it has to be the wrong way for pushing in a trolley loaded with books. But worse than this, despite slow springs, the one half-door crashes against the other half when they meet. Foam padding helps a little, and so does frequent adjustment of the springs, but this is one of those minor irritations which becomes hard to bear. I can still remember my horror when those doors were carried in, and I realised what we would have to endure. Inevitably I hammered the builder, though I knew it was nothing to do with him, and in any case he would not and could not take notice of any suggestions I made to him, for all approaches to the builder at all times must be made through the architect. This hint on building etiquette pass on to all future librarian-planners who have not yet had this experience.

Floors are a problem: so are windows, lighting and heating. When studying plans, unless you are favoured enough to receive a sectional drawing as well as a two-dimensional plan, you will have no idea of the height of windows, and you immediately ask where the heating pipes and radiators are to go. Recently there has been a reaction from the glass-box architecture of a few years ago, but I am firmly of the opinion that many architects, if not deterred by the Librarian, will assume that walls will consist of windows and/or radiators. Now personally I like plenty of air, daylight and warmth, but one must have books somewhere, and against a wall they take up very little space. In reading-rooms it is usually desirable to have island bookcases, but in library workrooms wall-shelving is essential, and it may be in some other special areas also. I scanned our plans with this in mind, and learned from the architect that skirting heating would be used in the reading-rooms, and radiators under windows in library workrooms, but it was not until much later that I remembered to check on the catalogue hall. Its function and furnishings were to me, clearly indicated on the plans, but not, alas, to the architect. He had no conception of wooden catalogue cabinets and their size, and appeared to be thinking in terms of half-a-dozen metal drawers. This emerged because half-way through the contract I decided to use one side of the catalogue hall for quick reference books

instead of reserving it for future catalogue expansion, and when I checked with the architect, expecting no problems, I discovered that both sides of the hall were to be almost entirely covered with radiators. I suggested under-floor heating, but it was too late. Eventually, due entirely to support and pressure from the Principal, an alternative solution was found, and most of our wall-space is intact and radiator-free. I am not getting at the architect in telling this tale – I am only trying to indicate the necessity for close attention to detail and for seeing the plans as they stand, and not assuming that things are there or not there because you are seeing them in your mind's eye rather than on the drawing.

And not a few words about lighting. We no longer have problems contingent upon pendant lights, with pools of light and shadow, and the difficulty of lighting bottom shelves, but there still seems to be no firm guidance on how much light is desirable or necessary. In the older parts of the Cardiff library we study at night in semi-gloom, while in the new parts we are dazzled if all lights are used. I don't see what the Librarian can do about this, for obviously on all technical matters one defers to the architect, and had I been told how many lumens we were having I would have had neither the knowledge nor the temerity to argue or recommend. But we have one problem which I never associated with lights, and I wonder if any of you suffer in this way: the lights are noisy. A murmur is acceptable, a low buzz can be tolerated, but a high-pitched constant hum is insufferable. We are obviously unlucky in the type of light fittings selected, and this fault in manufacture could not be anticipated, but I would be grateful if architects here would take note. After all, one does not expect to have noisy lights!

I have no idea how customary it is for the Librarian to choose furnishings, but I understand that choice of wall-colours and paints is the architect's concern. This is manifestly an area for close co-operation if a harmonious decor is to be achieved. There is also the problem of fixed furnishings, which are supplied as part of the contract, and paid for out of a different fund from the furnishing allocation. This leads to complications, especially over wall-shelving and free-standing shelving, and one has visions of what strange combinations might result from this splitting of requisitions. Are venetian blinds fixed furnishings? And what if you decide to have curtains instead? Do you ask for curtain rails to be included in the contract, and try hopefully to push curtains in as well?

It fell to my lot to choose and order all the furnishings for the Cardiff library, and I rejoiced at the opportunity given to me, allowing me to have what I wanted as far as the money would permit, but after 18 months of frustrating correspondence and many, many phone calls I am happy to think that I shall never again be called upon to furnish a library. We have by now almost got what we wanted and what was ordered, and we are very satisfied with quality and appearance – but what a struggle!

I have been talking about the way in which one library has been altered and extended, and some of you may ask me whether it is big enough. It is not – in five

years' time more space will be needed, but fortunately there is provision for it if money is available. No academic library can ever stop growing, and too many people outside the library profession fail to grasp this truth – they look with pride and satisfaction on a newly-opened building and think that is the end. But the Librarian can never relax, for the thought of how to proceed in ten years' time, or even five, is ever with him. One thing we must continually try to do is to persuade our Principals, and the D.E.S. that our constant concern for more space is not empire-building. One can never buy books and discard at the same rate, so growth is inevitable.

Improved library facilities mean that more people are attracted to the Library. The building is larger and more comfortable, the book-stock steadily increases, courses multiply and more readers make greater demands, but I do not recall that anyone in authority has yet suggested that all or any of these factors affect the recommended standards for library staffing. College libraries now are required to provide university-type services, with a library teaching programme in addition, but no-one considers how this is to be done with our present very inadequate staffs. I am delighted to have, at last, a functional library building and room to move, but the very size of the building immediately presents staffing problems which I cannot solve. As I said at the beginning, a library is a building, but it is much more than this, and even the most functional building cannot function without adequate staff. If the corollaries to a good building are not provided, the money is wasted.

LIBRARY PLANNING AND DESIGN, II.

by

M. A. MOORE. LIBRARIAN

WORCESTER COLLEGE OF EDUCATION

Unfortunately, I was not involved in the early planning for our new Library, so there are gaps in my knowledge. However, the various stages were well documented, and my deputy has been able to make a coherent story for me. So far as I can determine, the exercise was conducted exactly as the textbooks say it should be.

Following an initial statement by the Principal of the space allocation and the cost limit which we were permitted, the then Librarian produced a detailed brief which formed the basis for preliminary discussion within the College. This leaned heavily on D.E.S. College letter 4/69: *The design of libraries in colleges of education,* which I would strongly recommend to the attention of those who do not know it. There followed from this flow diagrams, detailed proposals for allocation of space, and eventually a formal brief to the architect prepared by the Vice-Principal. This led to sketch plans from the architect, and subsequently more detailed plans which were eventually approved and used as a basis for an estimate for submission to D.E.S.

What strikes one most forcibly about the early stages was the enormous amount of work which went into the production of briefs and plans. Both Librarian and Architect prepared themselves well by reading all the standard textbooks on library design, and visited other libraries. In addition, there was full consultation within the College and between the College and the City Architect's Department right from the start. It is often said that a library building is only as good as its brief, and that is certainly true in our case.

We were singularly fortunate in two respects. Firstly, the initial designs and planning were done by a young architect with real flair, who saw the Library as a personal prestige job, and who really did his homework. The result is a tribute to him. Secondly, we have in the College an able and very efficient Senior Administrative Officer, who really knows his job, and who nursed me through all the complicated procedures as the various stages arrived.

I should like now to say a little more about the relationship between librarian and architect.

It is commonplace for text books on library design to suggest that the architect should be responsible for the aesthetics and technical aspects of the building, whilst the librarian should be responsible for advising on function. In real life, however, it normally does not work out that way. Architects are an arrogant breed who find it difficult to imagine that a mere librarian can tell them anything about their job.

More important, however, is the fact that you cannot separate the aesthetic, technical and functional aspects of the building. In a library aesthetics are vitally important to the atmosphere of the building and to the way in which it is used but, left to himself, an architect can produce a library which, although impressive, or pretty, may be totally unworkable. Conversely, if he takes a traditional, severely functional approach to the

design, he may produce a library which is dreary and unattractive. On the other hand, a librarian with an understanding of how a library works, and a feeling for design, can make a very real contribution in this area. In our case, there was an arbitrary division of responsibility because the fabric of the building and fittings were paid for out of one fund, whilst all furniture and equipment were paid for out of another. Thus, the architect took very little interest, until pressed, in the design and materials incorporated in the furniture. Even the colour scheme was substantially our choice, although the architect drew up the final specification for the builder.

Again, although a librarian may not be competent to discuss the technical aspects of building construction, plumbing, heating, lighting, wiring, etc., these things all bear on how the building functions. A librarian worth his salt will take the trouble to find out enough to discuss such things intelligently, and to make it known that he feels he has a right to discuss them. He should teach himself how to read drawings. And it is vital that he sees and approves all drawings, including all technical drawings. It is also helpful if he can be present at the more important conferences with consultants. Otherwise he will end up with power points, light switches, thermostats, clocks, and water pipes where he wants to put shelving, with doors that open the wrong way or are the wrong size, with door closers that hold the door open when he wants them to swing shut, and so on. And it is essential in many cases to be asbolutely specific about such things, otherwise the results can seriously affect the efficient working of the library. Even technical matters like fenestration should not be left to chance, or the aesthetic whim of the architect.

The librarian must be prepared to assert himself, and to derive confidence from the knowledge that, as a profession, we have considerable experience of such matters, and are likely often to know more than the architect about the peculiar needs of books and libraries.

Now I should like to say a few words about some of the troubles which beset us along the way.

Building work had already begun when resource centres burst upon us and we took a hastly, although well thought out, policy decision to incorporate non-book materials in the new Library.

My Principal discovered, almost by accident, that it was possible, if one went about it the right way, to get extra space for this purpose from D.E.S. He also managed to get provisional approval for us to use for this purpose some of the space given over to study area in the Library.

In the event we were required, (i.e. the College Principal, the Architect and myself), to attend D.E.S. to argue our case. At first the D.E.S. representatives tried to suggest that we did not need more space. I showed them my layout for the Teaching

Practice Library and was told that, if I arranged things m. re efficiently, it would be possible to incorporate the non-book materials in the area without any further increase in space – this in spite of the fact that (a) they had already approved the space we had provided for the Teaching Practice Library and (b) my layout allowed for more books and readers than the formula in D.E.S. letter 4/69 suggested. However, they ended up by conceding that we could use not more than 800 sq. ft. of the study area, provided that this was made good in the future building programme, and provided that we could make the necessary alterations without further increase in cost.

We were then faced with the problem of very hastily re-thinking the whole area, of having revised drawings produced by the Architect for our approval, and of revised instructions being given to the consultants and the builder – all this whilst the building was already in course of erection.

The next blow came when the original architect left and the job was taken over by his superior. He, although technically in charge of the job, knew little about the detail, and we spent hours wearily going over all the documentation and trying to get things moving again.

Then the builders went bankrupt. This is a very common occurrence in the construction of large and difficult buildings like libraries, and can have disastrous consequences. In our case the building was already behind schedule and, by the time a new tender had been accepted and the revised cost approved by D.E.S., we had lost a further three months. In the end, however, by dint of much pushing and more patience, we ended up with a building which, by and large, gives us great pleasure.

Finally, a few words about suppliers. It seems to be endemic nowadays that very few people do a job properly the first time, or until badgered into doing so. Of the many firms we dealt with only one produced the goods when we wanted them, in conformity with our specification, and of a standard that we were prepared to accept. Whilst it has to be said, in fairness, that we did give some suppliers problems because we had to ask them to delay deliveries, nevertheless the general standard of performance was poor. This gave rise at least to frustration and, in one case, to major upheaval. The wear and tear on staff nerves and energies in the circumstances can be considerable.

We have learned a number of things from this exercise which can be summarized fairly briefly, and which I think are worth passing on.

You have to be prepared to know what you want and to drive yourself and everyone else to get it; to do an enormous amount of work; to be prepared to soak yourself in detail; to stand up to architects and assert yourself generally; to watch everything like a hawk; and to be prepared to accept nothing without a fight if it displeases you.

Finally, however, having painted what may seem a fairly black picture, I would like to say that we are all delighted with our new Library, that we have had great encouragement from the many compliments we have had, and that I personally would love to get my teeth stuck into another one.

A NOTE ON THE CONFERENCE EXHIBITIONS

by

E. O. CUNNINGHAM, TUTOR-LIBRARIAN,

CITY OF CARDIFF COLLEGE OF EDUCATION

The conference committee agreed that exhibitions should be a feature of the 1973 conference, as they had been in 1972, when in addition to the *Tann* collection of books for use in primary and middle schools, prepared by the Department of Education and Science, there were displays of selected non-book material produced by commercial firms, of publications of the *National Committee on Audio Visual Aids in Education*, and of reprographic and office equipment.

In 1973 the *Tann* collection, which is revised annually, was again displayed, and there was also an exhibition of equipment suitable for inspecting or using non-book material in the Library (video-cassette players, slide projectors and viewers, cassette and record players, etc), mounted by Holden (Photographics) Ltd., of Preston, for whose help the conference committee is grateful.

The other displays were all linked to the conference session on *Library planning and buildings*. Shelving and other library furniture were exhibited by Library Design and Engineering Ltd., Newman Street, London, W.1., whose equipment was chosen for the new Library at Worcester College of Education, and study carrels like those chosen for the Library extension at Cardiff College of Education were exhibited by Merrow Associates Ltd., of Guildford.

In addition, there were displays of plans and photographs prepared by Librarians of Colleges which had recently completed or were in the process of preparing either new library buildings (Worcester, Edge Hill, West Midlands, Bretton Hall), or extensions (Cardiff), or adaptations of other buildings for library use (Chorley). Conference members showed great interest in these displays, particularly as evidence of what it has been possible to achieve, and expressed regret that there is no detailed comprehensive record of work on College of Education library planning and buildings to which easy reference can be made, especially by Librarians seeking guidance when they face the problems of providing additional accommodation. There is need in the profession for such a record, for the L.A.'s building reports do not appear to be fully comprehensive and lack detail of design that is significant; and the library plans literature collection of the College of Librarianship Wales is also incomplete. The papers by Miss E.M. Owen (Cardiff) and Mr. M.A. Moore (Worcester) reveal the complexities of some of the tasks which they had to face respectively in extending an existing building and in creating a new one, but in this publication it is regrettably impossible to reproduce the plans of their library buildings or include a detailed photographic record comparable to the displays which they provided at the conference and which emphasised, visually, some of the point that they made. Likewise it is not possible to include the complete records and photographs of other library buildings that were displayed, notably of the library extension at Chorley College of Education provided by Miss J.B. Smith, where a former art room and the adjoining industrial premises have been converted for library use. Any Librarian daunted by the prospect of adapting unlikely buildings would be cheered to know what has been

achieved at Chorley, but sadly he cannot easily refer to details of this success and may even find it difficult to learn of it, in the absence of a register of the development of College Library buildings.

The photographs included in this publication are provided by the Librarians of the various Colleges depicted.

COLLEGE OF EDUCATION LIBRARIES

RESEARCH PROJECT:

REPORT OF DISCUSSIONS

by

J. PARMENTER. TUTOR LIBRARIAN

REDLAND COLLEGE, BRISTOL.

After an introduction to the main areas investigated by C.E.R.L.P. by Mr. Shercliff, the conference divided into ten groups to discuss the following topics:

1. Proposed staffing formulae.
2. Proposed book fund formula.
3. The library in operation and its effective use.

Two members of the research team, Mr. W.H. Shercliff and Miss C.A. Needham, circulated in order to answer questions in discussion. The conference then came together in general session, with Mr. A.J. Edwards as chairman, and the following points were among those made in reports of discussion.

PROPOSED STAFFING FORMULAE

1. There was general acceptance that some form of management study in college libraries was of considerable value, not only in terms of inter-library comparison, which unfortunately might lead to a levelling down of efficiency, but of an examination of work load within a particular college and determination of priorities on firm evidence.

2. Assessment of staffing on the basis of library business transacted rather than on student members was agreed to be far more realistic, and essential in view of the future diversification of courses in many colleges.

3. It was felt that detailed examination of present tasks undertaken was insufficient evidence for staff assessment; however the dangers of projection were realised.

4. With regard to the detail of the formulae presented by C.E.R.L.P. it was felt that too many assumptions were made. The complicated method of presentation meant that the way of calculation had to be taken on trust. Some lack of confidence was expressed in the proposed formulae for this reason, but it was hoped that the general principles would not be lost sight of, and that colleges could benefit by carrying out staffing studies based on these principles.

PROPOSED BOOK FUND FORMULA

1. There was general agreement that the assessment of book fund based on student numbers was unrealistic, and that C.E.R.L.P.'s proposal for calculation on the basis of need was sound. Subjects studied, levels of courses, geographical position and other factors examined in the report should all be taken into consideration. It was agreed that the basic principles stated in this section of the report provided a very useful basis for the development of a more flexible system of determining desirable expenditure in the post White Paper period.

2. The view was expressed that further thought was needed concerning the assessment of expenditure on non-book materials, which in the report was left to the Librarian's estimate. As most other aspects of the formula were specifically calculated, areas left for

estimation only weakened the case to be made to financing authorities. Concern was expressed that in judging the effectiveness of the proposed book grant formula there seemed to be a tendency to judge the outcome of its application in terms of pre-supposed need and the present situation. If the factors governing the compilation of a formula were accepted, then it must also be accepted that the result need not always match pre-conceived ideas.

THE LIBRARY IN OPERATION AND ITS EFFECTIVE USE

1. It was hoped that the information provided in the report on the detailed working of the library and the utilisation of materials and services would enable librarians to draw conclusions which would lead to more effective utilisation of learning resources. Some conference members expressed the view that although the report gave considerable information it was very difficult to draw any conclusions of general application. However, it was considered that the report did highlight the necessity for far more systematic evaluation of user satisfaction and examination of basic library procedures.

2. The detail presented by individual librarians in discussion highlighted the difficulties of inter-library comparison.

GENERAL CONCLUSIONS

1. It was felt that the report contained much useful information, but too often its conclusions and general principles were lost in a mass of data which could have been more successfully presented, perhaps more selectively.

2. While the report was described as "a gallant failure", many conference members hoped that the considerable amount of work contained in it would not be wasted. A summary was perhaps needed so that future discussions on e.g. staffing and book grant assessment coudl make use of its recommendations.

POSTSCRIPT

by

M. ROSE. PRINCIPAL

KING ALFRED'S COLLEGE, WINCHESTER

It is a pleasure to recall the Windermere Conference. I thought it well structured, containing a wide variety of material presented by a carefully selected group of experts, and, through the growing participation of course members, culminating in a frank appraisal of the future role of a College of Education librarian.

Professor Black illustrated the methods used in a recently founded University, which did not enjoy the Oxbridge advantages of the traditional tutorial system or the college library. At the University of Bath the siting of the new Library and the availability centrally of educational technology within associated seminar rooms were agents of change in learning methods.

The lectures and discussion that were concerned with the College of Education Library Research Project threw into relief the need for change: with regard to the students attitudes to learning; the resources at their disposal; the disposition of library staff; systems of lending and retrieval; and formulae to reflect both inflationary movements and the changing role of Colleges.

The future of the Colleges was emphasised in the session dealing with the planning and building of new libraries. Apart from being alerted to the hazards of noisy lights and radiators stealing wall space we were urged to pay special attention to door hinges. The new libraries will be serving new types of institutions with a possible growth of postgraduate work, the inception of 3 year B. Ed. and other diversified degree courses. In such a situation it was envisaged that the library itself might give way to the multi-media approach leading to a centrally sited and organised Resources for Learning. Mr. Clayton depicted the dilemma of the librarian in these changing circumstances as being locked in a backroom or trampled to death by the onrush of educational technology.

Such a gloomy fate for the College Librarian was not the consensus of opinion at the end of the Conference. On the contrary, the librarian was seen as advancing firmly out of that backroom, and coming to terms with educational technology and existing in happy co-partnership with it or absorbing it within a Learning Resources Centre.